



PRESIDENT'S MESSAGE

Happy New Year! I hope you are looking forward to another busy year of member activities and public teaching events. At the Academy level, we look forward to planning our two main public events—the Spring Lecture and the Fall Paper Session plus Lecture. We will also be present at various events sponsored by other organizations. Please volunteer your time and expertise when the call goes out to the sections to ‘strut their stuff!’ I’m certain you will enjoy the opportunity to share your passion about space, rocks, or wildlife while teaching people about the natural world.

Don't forget the *Proceedings* of the RAS is now available. Volume 20 features two articles about local geology, all the abstracts of talks and posters presented over the last ten years at the Fall Paper Sessions, plus lists of officers and RAS Fellows. If your family is interested in acquiring a free copy of this publication, please see your section leaders, who will have some books available at upcoming meetings.

The Tasmanian Devil (Part 1)

By Jutta S. Dudley

Tasmania, the island state of Australia, is home to unique animals. The Tasmanian devil, a carnivorous marsupial known as Purinina to the native people or to biologists as *Sarcophilusharrisii*, is one of these.

Due to its unique behavior and endangered species listing, the Tasmanian devil has become a popular symbol for groups in Tasmania. Even Looney Tunes made the devil famous, but added to our misunderstanding of the real animal!



Tasmanian devils in a communal tug on what's left of a wallaby. Trowunna Wildlife Park. Mole Creek, Tasmania. Photo by J S Dudley

The species resided on the mainland until perhaps a few hundred years ago, but now lives wild only on the island. It's the largest (13-18 pounds) marsupial carnivore in the world today and would be second largest had the larger thylacine (also called Tasmanian wolf/tiger) not become extinct in 1936.

The name “devil” derives from their reputation as noisy, vicious critters. Their vocalizations range from loud growling to screeching sounds; sounds that can seem rather frightening to human ears. This noise-making commonly accompanies their rough interactions with both carcass and other devils

when feeding communally.

Stout and muscular, the devil's large head and neck allows the wide-opening-jaw to chomp through bone and rip up flesh and skin. They hunt but mostly scavenge, eating almost anything handy: rodents, fish, insects, fruit, frogs, birds, wombats, wallabies, and sheep. Their long toes and non-retractable claws enable good grasps of prey and food.

The social lives of devils are not well known but recent field studies reveal these apparently solitary animals do maintain a large social network over a region. They are known to defecate in communal plots and will eat a carcass together. Communal eating is accomplished with much jostling and biting amongst the devils, while ripping and pulling on the remains of the carcass from all directions. In the wild life parks where tourists can watch the action, it looks like fast action team work getting the corpse down to the last ball of fur!

A mature female devil gives birth at two years to 20-40 embryonic young that are the size of a rice grain. She has only four nipples, so just a few survive. The lucky pups/imps develop in her backward facing pouch for 105 days and then are released from her body into the den where they will safely reside and continue to get milk. They will go on forays with the mother until they are finally independent. By that time the mother will have been on duty longer than 10 months.

To be continued.....

It's time to renew your membership!
Please take a moment to send in your renewal now.

2013 Membership Form

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For your convenience, please pay your dues to the R.A.S. and its sections with a single check.

Make check payable to: Rochester Academy of Science, Inc.

CIRCLE the amount you are paying for RAS membership in the RAS column and again for the section(s) in which you wish membership.

Membership Categories- <i>R.A.S. dues are a prerequisite for section membership</i>	Rochester Academy of Science	Anthropology Section	Astronomy Section	Life Sciences Section	Fossil Section	Mineral Section	Total
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Interested in serving on a Section committee? Select & check a box ⇨⇨	⇨⇨⇨						

Milton Baxter, the RAS Herbarium, and the Future

by Steven Daniel

RAS has an incredible resource in its Herbarium, which is under the auspices of the Life Sciences Section, and curator Elizabeth Pixley. Our collection of an estimated 60,000 specimens, the majority of them local, provides an irreplaceable record of the flora of our area back into the 19th century. Since we moved the Herbarium to RMSC a decade ago, Liz has led a dedicated group of volunteers in repairing and organizing the collection, so it is more useable to researchers.

Over the last year, I have begun to work through one small part of the Herbarium – the genus *Carex* which is a member of the sedge family, the Cyperaceae. *Carex* is by far the largest plant genus in New York, and in North America. Although sedges have a reputation for being an onerous group, they are in fact quite learnable with proper training (New York Flora Association <http://www.nyflora.org/> offers outstanding workshops on sedges and other plant groups). Recognizing some of the common sedges in the field adds a great dimension to understanding many plant communities in New York, not only in wetlands, but in woodlands and grasslands as well.

To date (November 2012), I have looked at over 1700 specimens – most were collected between the time of the Civil War and World War II. Very few collections have been added to our Herbarium since the 1940s. Most are from the Rochester area and nearly all are from New York. I have annotated them where needed – e.g. updated the nomenclature, made corrections on identification – and have recorded all the information into a database. I've discovered that one person, Milton Baxter, was responsible for more than half of the sedge collections, and his accuracy was outstanding.

Continued on page 3

Events for January, 2013

For updates to events, check the Academy website, <http://www.rasny.org>, and Section websites.

NO FOSSIL SECTION MEETING THIS MONTH

Fri 04 ASTRONOMY SECTION

7:00 p.m. General Meeting. RIT, Gosnell Hall, Room A300-. Brandon Doyle will present a talk on George Hale. Also, there will be an Astro 101 (basic astronomy concepts) short talk. Snacks/conversation at 6:30 p.m. Contact Carol Latta (585) 230-9548

Sat 05 LIFE SCIENCES SECTION

3-10 p.m. Karen Wolf's home- 1397 Five Mile Line Road, Penfield. Winter Tree Identification and Dish to pass Dinner party. 3 p.m. Tree ID will be led by Ken Wolf around the property (dress for standing in cold places) and dinner around 5:30-6:00. Sandwich meat and drinks provided, bring a dish to pass for about 6-8 people. We will have Herbarium updates and discuss future Tree ID field trips etc. Contact Karen Wolf (585) 670-9709.

Mon 07 ASTRONOMY SECTION

7 p.m. Board Meeting. U of R, Bausch & Lomb, Chart Room. Contact Carol Latta (585) 230-9548

Tues 15 MINERAL SECTION

7:00 – 9:00 p.m. (Please note new time). Monthly Meeting. Brighton Town Hall, Downstairs Meeting Room, 2300 Elmwood Ave. 7 p.m. snacks/conversation. 7:15 p.m. meeting. Anthony Vodacek, Ph.D., of RIT, Center for Imaging Science, Digital Imaging and Remote Sensing Laboratory, will speak on “**Remote Sensing of Geohazards in the African Rift Valley System.**” For more info on Tony, <http://www.cis.rit.edu/user/53> Door prizes and refreshments. Visitors welcome. Contact Stephen

Busschaert, mineralvp@rasny.org or (585) 288-5683

Wed 16 RAS BOD MEETING

7 p.m. Brighton Town Hall, Conference Staging Room.

Wed 16 LIFE SCIENCES SECTION

1-4 p.m. Workshop at the RAS Herbarium, located in the basement of the Rochester Museum and Science Center (RMSC). No experience needed! Plan to come and help with this valuable collection. If you plan to attend, please send an RSVP to Elizabeth Pixley. At RMSC, go to the front desk and ask staff person there to call ext. 368, the phone in the Herbarium. For more information, contact Elizabeth Pixley epixley@rochester.rr.com or (585) 334-0977

Sun 20 MENDON WINTERFEST

11 a.m.-4 p.m., Mendon Ponds Park, East Lodge, Canfield Rd. Mendon. **Astronomy Section** will provide solar observing. Contact Vicki Rotolovickirotolo@gmail.com **Mineral Section** will have a local mineral display & talk to the public. Contact mineralvp@rasny.org or (585) 288-5683 to volunteer.

Fri 25 ASTRONOMY SECTION

7 p.m. RIT, Gosnell Hall, Room A-300. The Winter Member Education series will kick off with Joel Schmid giving a talk on Planetary Image Processing. Contact Joel Schmid scully@rochester.rr.com

ONGOING- ASTRONOMY

ASRAS will operate the telescope at Strasenburgh Planetarium on all clear Saturday nights. Contact

Looking through other groups of plants in the herbarium, it appears that Baxter's work is represented across all groups. He appears to have been an equal opportunity botanist, though I suspect he may have had a special fondness for sedges.

This got me wondering, just who was Milton Baxter? Here is the abridged version: he was born on a farm near Spencerport in 1855, and died at age 83 in 1938, a day he was scheduled to lead a walk for Burroughs Audubon Nature Club. He was known as the “soul” of the Botany Section. Self-taught, his collections span 60 years. This one individual, mostly forgotten today, was largely responsible for making our herbarium the treasure it is.



Once all the sedges have been recorded in the database – the information will be sent electronically for inclusion in the online New York Flora Atlas <http://newyork.plantatlas.usf.edu/>. That way anyone in the world can see what species are in the RAS Herbarium (ROCH). The long-term goal is to database the entire Herbarium, with priority given to plants of New York. To do that volunteers are needed. Individuals with computer skills, interest in plants, and attention to detail, are welcome to help on this project. If you're interested contact me at natdisc@gmail.com or Elizabeth Pixley (epixley@rochester.rr.com)

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January, 2013 - Vol. 70, #1, Page 4

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For applications and/or more information, contact Jutta Dudley, 140 Railroad Mills Road, Pittsford, NY 14534; by telephone (585) 385-2368; or by e-mail <pres@rasny.org>.

The **Academy** Internet website is <http://www.rasny.org>

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